

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Golhofer on December 28, 2010.

The application has been amended as follows:

Claim 30: On line 4, delete "**unit**" and replace with "**means,**".

Allowable Subject Matter

2. Claims 17, 18, 21-28, 30, and 32 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding **claim 17**, Tellado et al 20040052228 discloses a method for synchronizing a radio communication system divided into radio cells transmitting data by multiple access methods, each radio cell having a base station for radio provisioning mobile stations assigned to the radio cell, comprising: receiving at the base station of a radio cell, mobile station signals of the radio cell, and determining a synchronizing value for at least one of time and frequency synchronizing. Lindoff et al 20050107039 discloses receiving at the mobile station of the radio cell, base station signals of the radio cell and adjacent radio cells.

The instant invention discloses receiving at the base station of a radio cell, mobile station signals of the radio cell and adjacent radio cells; determining, from the mobile station signals received at the base station, a first synchronizing value for at least one of time synchronizing and frequency synchronizing to which the base station synchronizes itself; determining, from the base station signals received at the mobile station, a second synchronizing value for at least one of time synchronizing and frequency synchronizing; employing timeslots of commonly assigned carrier frequencies as radio transmission resources, wherein at least two adjacent base stations simultaneously and jointly employ a timeslot of a carrier frequency for radio provisioning a respectively assigned mobile station; and selecting the timeslot from the commonly assigned radio transmission resources taking account of an interference situation in the timeslot. The above novel features in combination with other limitations of claim 17 are neither taught, suggested, nor made obvious by Tellado et al, Lindoff et al, or any other prior art of record. Claims 18 and 21-27 are allowable by virtue of their dependency on claim 17.

Regarding **claim 28**, Tellado et al 20040052228 discloses a base station, in a radio cell of a radio communication system divided into radio cells transmitting data by multiple access methods, for radio provisioning mobile stations assigned to the radio cell, comprising: a receiver receiving mobile station signals of the radio cell, and determining a synchronizing value for at least one of time and frequency synchronizing.

The instant invention discloses receiving mobile station signals of the radio cell and adjacent radio cells and utilizing time slots of jointly assigned carrier frequencies of

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an adjacent base station as radio transmission resources wherein the base station and the adjacent base station simultaneously and jointly employ a time slot of a carrier frequency for radio provisioning of a mobile station, and selecting the time slot from the commonly assigned radio transmission resources taking account of an interference situation in the time slot; and a processor determining from the mobile station signals, a synchronizing value for at least one of time synchronizing and frequency synchronizing to which said base station synchronizes itself. The above novel features in combination with other limitations of claim 28 are neither taught, suggested, nor made obvious by Tellado et al or any other prior art of record.

Regarding **claim 30**, Tellado et al 20040052228 discloses a radio communication system divided into radio cells transmitting data by multiple access methods, each radio cell having a base station for radio provisioning mobile stations assigned to the radio cell, comprising: at least one base station, each assigned to a corresponding radio cell, receiving mobile station signals of the corresponding radio cell and determining, from the mobile station signals, a synchronizing value for at least one of time synchronizing and frequency synchronizing of the at least one base station.

The instant invention discloses a time slot unit assigned to a corresponding radio cell, assigning time slots of jointly assigned carrier frequencies of an adjacent base station as radio transmission resources wherein the base station and the adjacent base station simultaneously and jointly employ a time slot of a carrier frequency for radio provisioning of a mobile station, and selecting the time slot from the commonly assigned radio transmission resources taking account of an interference situation in the time slot;

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and at least one base station, each assigned to a corresponding radio cell, receiving mobile station signals of the corresponding radio cell and adjacent radio cells and determining, from the mobile station signals, a synchronizing value for at least one of time synchronizing and frequency synchronizing of the at least one base station. The above novel features in combination are neither taught, suggested, nor made obvious by Tellado et al or any other prior art of record.

Regarding **claim 32**, Tellado et al 20040052228 discloses a method for synchronizing a radio communication system divided into radio cells transmitting data using a multiple access method, comprising: assigning each radio cell a respective base station for radio coverage of a plurality of mobile stations assigned to the radio cell; receiving at the base station, signals from the plurality of mobile stations in adjacent radio cells; and determining from the signals from the plurality of mobile stations in, a synchronization value for at least one of a time synchronization and a frequency synchronization. Lindoff et al 20050107039 discloses receiving at the base station of the radio cell, base station signals of adjacent radio cells.

The instant invention discloses utilizing time slots of jointly assigned carrier frequencies of adjacent base stations as radio transmission resources wherein two adjacent base stations simultaneously and jointly use a time slot of a carrier frequency for radio coverage of a mobile station; receiving at the base station, signals from the adjacent base stations, and signals from the plurality of mobile stations in adjacent radio cells; and determining from the signals from the adjacent base stations and the signals from the plurality of mobile stations in adjacent radio cells, a synchronization value for at

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least one of a time synchronization and a frequency synchronization. The above novel features are neither taught, suggested, nor made obvious by Tellado et al, Lindoff et al, or any other prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goeddel 6,546,026 discloses multi-diversity synchronization technique for improving synchronization performance in wireless applications over fading channel.

Sayers et al 6,542,754 discloses synchronizing click signals in wireless networks.

Iseyama 5,787,346 discloses radio channel assignment method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE-AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2617

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